



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/732,849	12/09/2003	Takashi Tsutsumi	03689/LH	8810
1933	7590	11/23/2005	EXAMINER	
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC 220 5TH AVE FL 16 NEW YORK, NY 10001-7708			LIANG, LEONARD S	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/732,849</p>	<p>Applicant(s)</p> <p align="center">TSUTSUMI ET AL.</p>	
	<p>Examiner</p> <p align="center">Leonard S. Liang</p>	<p>Art Unit</p> <p align="center">2853</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-19 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9 and 17, drawn to an ink jet printer comprising: a drying member control section for controlling an operation of the drying member; a heating member control section for controlling heating of the recording medium; an ink volume calculating section for calculating volume of the ink ejected to a predetermined unit area of the recording medium when the image is formed by the image forming section; and an ink volume judging section for judging whether the volume of the ink, which is calculated by the ink volume calculating section is not less than a fourth predetermined value and an image recording method using an ink jet printer comprising the step of adjusting an amount of dryness of the ink used for forming the image after the forming step and before the fixing step, in accordance with a temperature and a humidity in the ink jet printer, classified in class 347, subclass 17 (for example, see figure 2B).
- II. Claims 10-13 and 18, drawn to an ink jet printer comprising a combination decision section for deciding a combination of a plurality of inks used for forming the image by the image forming section and an ink volume adjusting section for adjusting volume of the inks ejected to a predetermined unit area of the recording medium when the image is formed by the image forming section, by changing the combination of the plurality of inks, which is decided by the combination

deciding section, in accordance with the temperature detected by the temperature detecting member and the humidity detected by the humidity detecting member so that the volume of the inks is not less than a first predetermined value and an image recording method using an ink jet printer comprising steps of deciding a combination of a plurality of inks used for forming the image in the forming step and adjusting volume of the inks ejected to a predetermined unit area of the recording medium when the image is formed, by changing the combination of the plurality of inks, which is decided in the deciding step, in accordance with a temperature and a humidity in the ink jet printer so that the volume of the inks is not less than a predetermined value, classified in class 347, subclass 7 (for example, see figure 16B).

- III. Claims 14-16 and 19, drawn to an ink jet printer comprising a combination .
- deciding section for deciding a combination of a plurality of inks used for forming the image by the image forming section in accordance with the temperature detected by the temperature detecting member and the humidity detected by the humidity detecting member so that volume of the inks ejected to a predetermined unit area of the recording medium when the image is formed by the image forming section is not less than a predetermined value and an image recording method using an ink jet printer comprising step of deciding a combination of a plurality of inks used for forming the image in accordance with a temperature and a humidity in the ink jet printer so that volume of the inks ejected to a predetermined unit area of the recording medium when the image is formed in the

forming step is not less than a predetermined value, classified in class 347, subclass 5 (for example, see figure 17B).

Inventions I, II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions all have different modes of control. The control system of Invention I comprises an ink volume calculation program; an ink volume judgment program; a drying portion control program; and a heating control program. The control system of Invention II comprises a combination decision program and an ink volume adjustment program. The control system of Invention III comprises a combination decision program and a combination decision table.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S. Liang whose telephone number is (571) 272-2148. The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2853

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/17/05
lsl *LSL*


Stephen D. Meier
Primary Examiner